5A - Close Northbound 29th Off-ramp

Overview

The short exit ramp at 29th Avenue does not meet current design standards, and ends opposite an elementary school. With peak hour volumes over 500 vehicles/hour, this ramp forces a large volume of vehicles to decelerate on the freeway mainline. Accident rates at this location are over three times the state average, and this location is an operational bottleneck. The ramp is extremely short (320 feet), which does not provide an adequate deceleration length.

Key Project Elements

- Close the 29th Avenue off-ramp. Traffic would be diverted to High Street and 23rd Avenue.
- Construct a soundwall in the vicinity of the current ramp consistent with the Visual Improvement Program.
- Enhance landscaping of adjacent areas.

Benefits

Operational analysis indicated that any traffic shifting to the High Street off-ramp will reduce the bottleneck at the High Street on-ramp, thereby significantly improving mainline operations. Eliminating the reduction in mainline speed near the off-ramp will improve safety. The soundwall will reduce noise impacts at the school and potentially in the Jingletown neighborhood.

Issues and Impacts

Increased traffic on local roads could increase congestion and require mitigation. There could be perceived economic impacts to the Fruitvale Station shopping center. Increased traffic at other ramps could increase congestion on the freeway.

The Fruitvale Bridge has been designated by the City of Alameda as a Lifeline Access Route for all seismic events. This project is in direct conflict with circulation needs to that lifeline.

Community outreach, and opportunities for public input will be a critical aspect of this project.

Implementation Steps

Conduct community outreach

Conduct PSR/PR/ED*

CTC/Federal approval (for 5A)

Prepare PS&E

Prepare MOU

Obtain right-of-way

*Project 5A could potentially be developed with a permit, subject to Caltrans approval

Implementation Timeframe

3 - 5 years (potentially earlier with Project 5A)

Potential Funding Sources

STIP

Estimated Cost

$0.9 Million (no additional right-of-way required)

Related Projects

6A - Relocate 29th/Lisbon Avenue On-ramp

CW13 - Visual Improvement Program

Participating Agencies

Caltrans

City of Oakland

City of Alameda

ACCMA

Project 5A- NB 29th Off-Ramp Closure

5B - Construct A Deceleration Lane In Advance Of The Northbound 29th Off-ramp

Overview

The short exit ramp at 29th Avenue does not meet current design standards, and ends opposite an elementary school. With peak hour volumes over 500 vehicles/hour, this ramp forces a large volume of vehicles to decelerate on the mainline. Accident rates at this location are over three times the state average, and this location is an operational bottleneck. The ramp is extremely short (320 feet), which does not provide an adequate deceleration length.

Key Project Elements

- Construct a separate (parallel) deceleration lane for the 29th Avenue off-ramp.
- Realign 9th Street to the east, requiring a strip of right-of-way from Fruitvale Station.
- ` Maintains existing access and circulation patterns.
- Enhance landscaping of adjacent areas.

Benefits

This improvement would reduce vehicle slowing in the through lanes on the mainline, allowing vehicles to decelerate on the ramp instead. It would improve sight distance for vehicles exiting at 29th Avenue, and provide additional storage for queued vehicles. All of these design improvements should address the reduction in mainline speed near the off-ramp and improve safety.

Issues and Impacts

This alternative would require acquisition of additional right-of-way to maintain two-way operations on 9th Street in front of the shopping center. This acquisition of right-of-way will require negotiations with several property owners throughout the area so that the functioning of the school, shopping center and other properties are not compromised.

Implementation Steps

Conduct community outreach

Conduct PSR/PR/ED*

CTC/Federal approval (for 5A)

Prepare PS&E

Prepare MOU

Obtain right-of-way

*Project 5A could potentially be developed with a permit, subject to Caltrans approval

Implementation Timeframe

3 - 5 years (potentially earlier with Project 5A)

Potential Funding Sources

STIP

Estimated Cost

$4.2 Million (unknown right-of-way costs)

Related Projects

6A - Relocate 29th/Lisbon Avenue On-ramp

CW13 - Visual Improvement Program

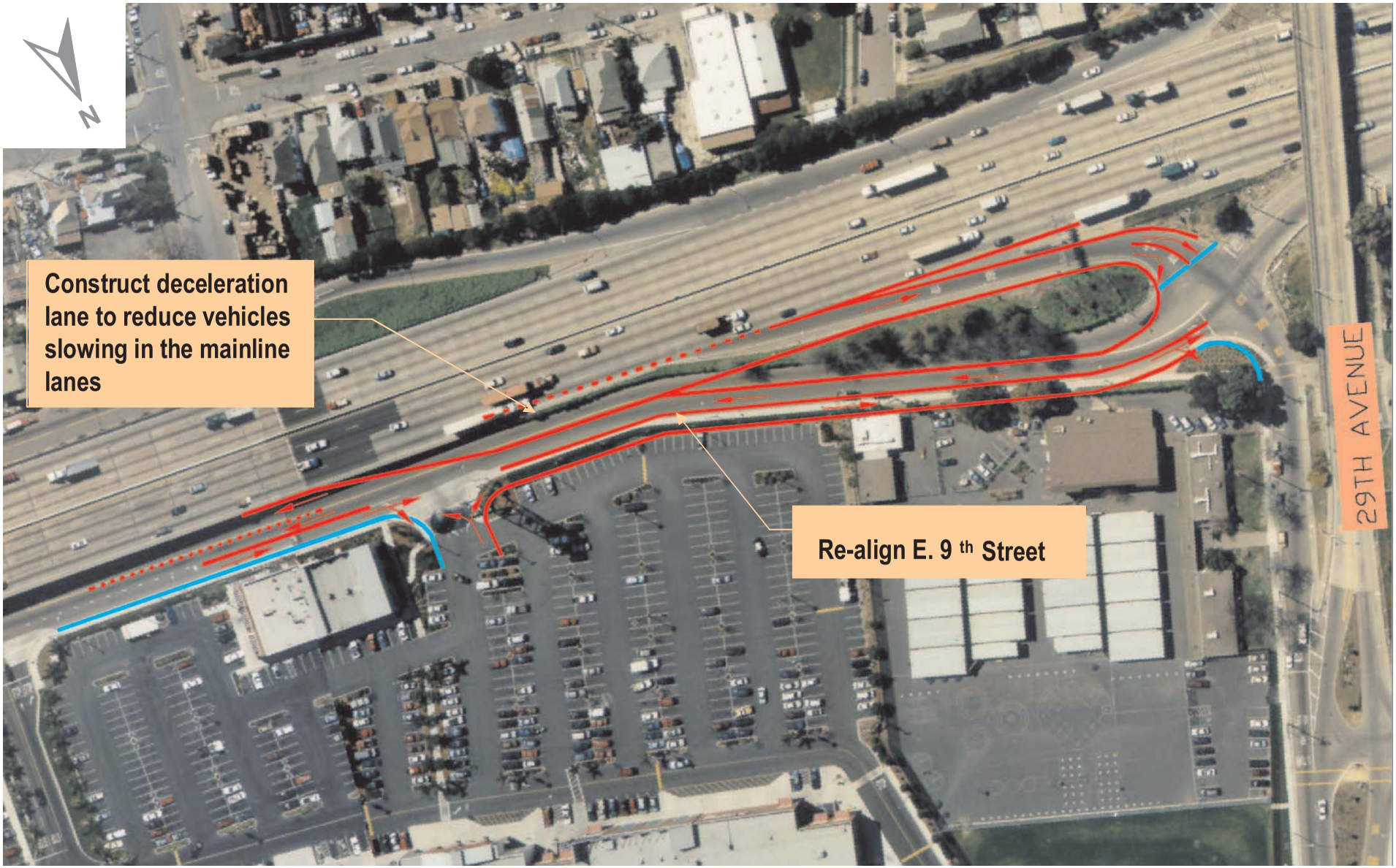
Participating Agencies

Caltrans

City of Oakland

City of Alameda

ACCMA



Project 5B- NB 29th Off-Ramp Deceleration Lane

6A - Relocate 29th/Lisbon Avenue On-ramp

Overview

The weaving section between the 29th Avenue (Lisbon Avenue) on-ramp and the 23rd Avenue off-ramp is significantly shorter than current design standards. There are speed differentials due to vehicles entering the freeway at 29th/Lisbon and exiting at 23rd Avenue. Accident rates in this section are about twice the state average, and the weaving section is an operational bottleneck.

Key Project Elements

- Realign the 29th Avenue on-ramp to the south, increasing the weaving distance to the 23rd Avenue off-ramp.
- Convert local streets (Portwood Avenue, Lisbon Avenue, and 8th Street) to one-way operations.
- Eliminate neighborhood access to the freeway from north of 29th Avenue.
- Create a new access roadway through the shopping center to provide access to the school from the residential properties to the north.
- Enhance landscaping of adjacent areas.

Benefits

Increasing the length of the weaving section will increase capacity and reduce the speed differentials in this section. This improvement will reduce weaving conflicts, reduce mainline congestion and improve safety.

Issues and Impacts

Acquisition of the gas station on the corner of Portwood Avenue and Eight Street may be required due to reduced access. Access to 9th Street from the 23rd Avenue off-ramp would be eliminated. Shopping center right-of-way would be needed to create an access road for the school. Community outreach and opportunities for public input will be a critical aspect of this project.

Implementation Steps

Conduct community outreach

Conduct PSR/PR/ED

CTC/Federal approval

Prepare PS&E

Prepare MOU

Obtain right-of-way

Implementation Timeframe

5 years

Potential Funding Sources

STIP

Estimated Cost

$5.5 Million (including $2.8 Million in right-of-way)

Related Projects

5B - Construct a deceleration lane in advance of the NB 29th off-ramp

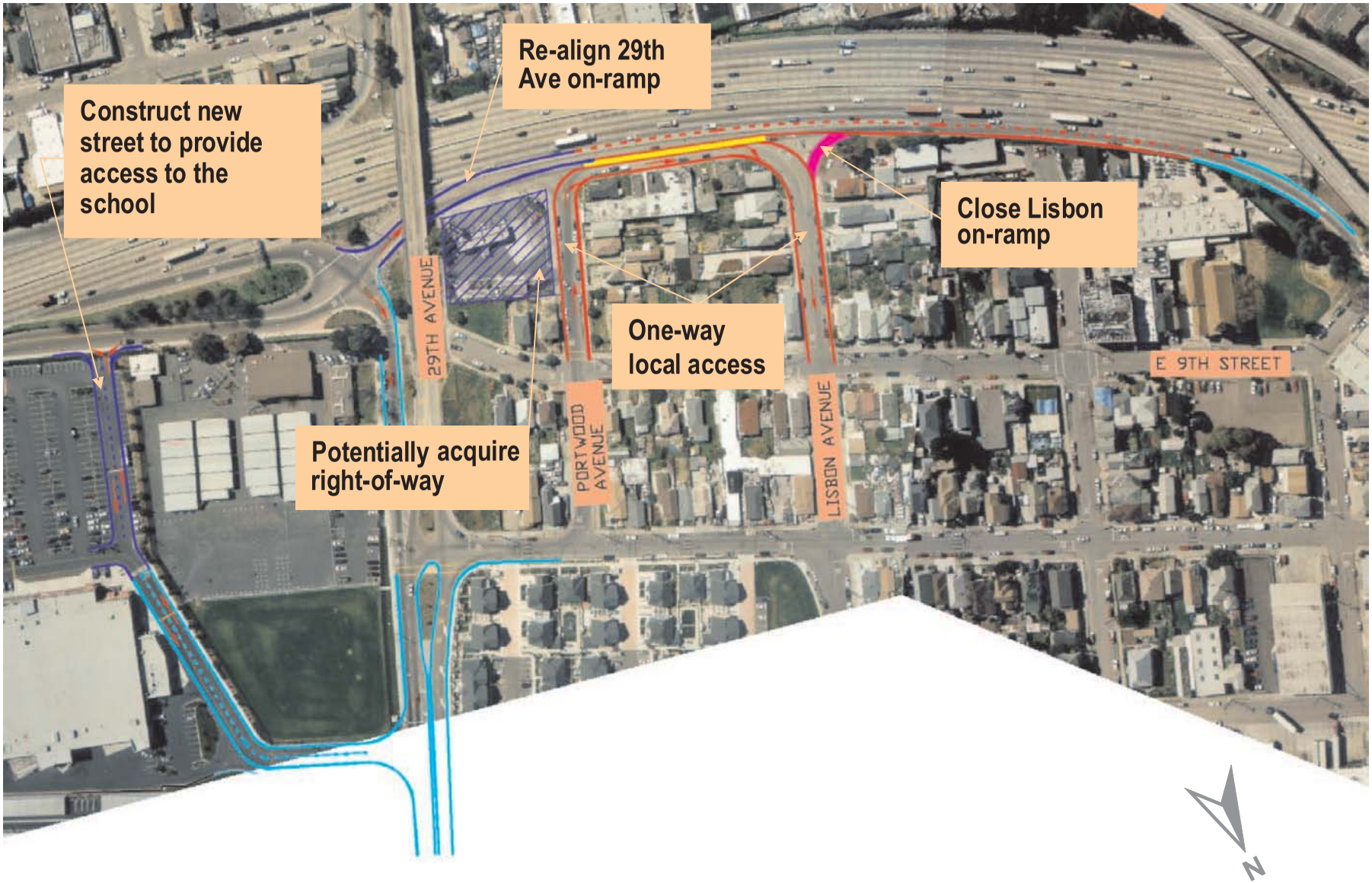
CW13 - Visual Improvement Program

Participating Agencies

Caltrans

City of Oakland

ACCMA



Project 6A-NB 29th/Lisbon On-Ramp Deceleration Lane